Oral Health: An Essential Component to Overall Health

New School Nurse Education

Robin Miller, RDH, MPH
Oral Health Director, Vermont Department of Health
Today’s agenda

- Oral Health and Overall Health
- **Toddlers** – (0–5) Early Head Start, Head Start, preschool and Kindergarten
- **Elementary age** children – (6–12)
- **Teenagers** (13–19)
- FAQs & Dental Emergencies
- Additional Resources
Oral Health is Part of Overall Health

- Dental decay is the most common chronic disease of childhood.
- Untreated tooth decay can undermine children’s ability to eat, sleep, grow, and learn.
- Students miss an average of 51 million hours of school a year because of dental pain.
- High school students reporting recent toothaches were 4 times as likely to have a low GPA as other students.
Children infected with the bacteria that causes tooth decay before age 2 are set up for a lifetime of more decay.

Children who experience dental decay are more susceptible to problems as adults.

Research has linked gum disease to diabetes, heart disease, pregnancy complications… the cycle continues.
147,901 children in Vermont (2015)

- 51% of Vermont children are enrolled in Medicaid, or approximately 75,350 children

- 59% of those children visited a dentist in the past year or about 44,567.

Why did over 30,000 eligible kids not see a dentist?

- Do not believe they have a reason to go
- Do not have a dentist/difficulty in getting appointment
- Cost
- Cannot leave work
- Transportation issues
- Dentist did not accept Medicaid
Toddlers: 0–5
The Data

Percent of children insured by Medicaid who accessed preventive care in 2015

Data source: Department of Vermont Health Access

Vermont Department of Health
The Problem
Key Facts

Based on Vermont’s Medicaid claims data, in 2014, 1,718 Medicaid-eligible children aged 1–5 received dental treatment (for extractions, endodontics, or restorations) for a total of $2,497,842 paid claims.

Of those children, 395 were treated in a hospital setting, for a total of $1,907,344 paid claims for treatment in a hospital setting.

The average amount paid per child treated in a hospital setting was $4,829.
Toddlers: The Problem

Key facts, continued:

- Untreated cavities are **highly correlated with low SES**.
- **Dentists** don’t always want to see very young children *(under age 3)*.
- **Doctors** don’t always check young children’s oral health.
- **Parents** don’t always know it’s important.

Vermont Department of Health
Solutions

- Public Health Dental Hygienists in VDH district office WIC clinics
  - Currently in five District Offices
  - Hope to expand to all District Offices (12)

- Role of PHDH
  - Education of DO staff
  - WIC clinics for pregnant women and children 0–4
  - Communicate with health professionals
Integration of Oral Health in Primary Care to Reduce Early Childhood Caries
Tooth Tutors – Hygienists in Head Start

- Target children who have not been to the dentist
- Care coordination – linking children with local dental homes
- Dental Health Education
Elementary School: 6–12
The Data

Percent of children insured by Medicaid who accessed preventive care in 2015

Data source: Department of Vermont Health Access

Vermont Department of Health
What’s most important for Oral Health for these grade school kids?

- Prevention, Prevention, Prevention
  - A dental home
  - Fluoride exposure
    - Community water fluoridation or tablets
    - Topical fluoride in a dental office
    - Fluoridated toothpaste
  - Dental Sealants – *plastic coating on permanent molars*
    - Particularly for “at-risk” children
    - 1\textsuperscript{st} permanent molar (age 6–7)
    - 2\textsuperscript{nd} permanent molar (age 12–13)
2016–2017 Survey

- 31.4% of children in Kindergarten and 3rd grade had a history of dental decay
  - *Healthy People 2020 goal of 49%*

- 13.6% of children in Kindergarten and 3rd grade had untreated dental decay
  - *Healthy People 2020 goal of 26%*

- 55% of children in 3rd grade had sealants on at least one of their permanent molars
  - *Healthy People 2020 goal of 28%*
Tooth Tutor Program

- Goal
  - Connect children (and pregnant women) with dental homes.
  - Targets children who are not up-to-date with dental care.
  - Oral health education

<table>
<thead>
<tr>
<th>Elementary Schools/Middle Schools</th>
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<td>~100 elementary/middle schools</td>
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<td>33 Tooth Tutors</td>
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Tooth Tutors: Education

- **Classroom Education**
  - Visit classrooms
  - Make oral health fun and relevant

- **School-wide Education**
  - Developing relationships with school nurses (that’s you!)
  - Serving on committees
  - Attending school events and wellness fairs

- **Family Education**

- **Focus on Sealants**
Tooth Tutors: Dental Homes

- Identify children in need of dental care and dental homes.
- Work with dental offices to accept students and to obtain sealant data.
- Work with families to access care: family education.
  - Explaining importance of oral health
  - Correcting misconceptions
  - Explaining coverage
  - Helping with access
Tooth Tutor Program Organization

Supervisory Union (funding Agent)

Compiled Data

Office of Oral Health VDH

Funding

Compiled Data

Tooth Tutor School

Data

Funding and Supervision

CDC

Vermont Department of Health
Teens: 13–18
Percent of children insured by Medicaid who accessed preventive care in 2015

Data source: Department of Vermont Health Access

The Data

Percent of children insured by Medicaid who accessed preventive care in 2015

- 1-2 years: 26%
- 3-5 years: 61%
- 6-9 years: 71%
- 10-14 years: 68%
- 15-18 years: 60%
- 19-20 years: 38%

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Teens: Risky behaviors and oral health

- Tobacco use (dip, Juul)
- Nutrition
  - Sugar-sweetened beverages
  - Eating disorders
- Oral piercings
- Oral sex
In 2012, the National Youth Sports Safety Foundation predicted that more than 3 million teeth would be knocked out in youth sporting events that year.

Athletes who don't wear mouth guards are 60 times more likely to suffer damage to their teeth.

25% of school-aged children will suffer a dental injury this year.

The cost of replacing these 3 million knocked out teeth can cost $9 billion dollars initially and $90 billion over a lifetime.
Teens: Gaps in Access

- Most High Schools do not participate in the Tooth Tutor program
- Have insurance, but don’t access care
- What resources are there to help?
One of the best resources… your own! NASN

- Visit NASN’s *Oral Health Connections*, an interactive website for quick and easy school oral health links.

- Funded by the DentaQuest Foundation, this site includes:
  - Oral health knowledge interactive self assessment
  - Links to NYU’s *Smiles for Life Oral Health Curriculum* and other curricula for health providers
  - NASN Radio Program: *Nurse's Guide to Student Oral Health*
Additional Education Resources

- National Institute of Dental and Craniofacial Research
  https://www.nidcr.nih.gov/orderpublications/

- American Dental Association’s “Smile Smarts” Oral Health Curriculum
  http://www.ada.org/390.aspx

- The National Maternal and Child Oral Health Resource Center
  http://www.mchoralhealth.org/
Frequently Asked Questions by school nurses
I spend a lot of time on the phone trying to find dental care for the students in my school. Is there a published list of dental professionals and clinics that accept Medicaid or a website I might go to?

- All Federally Qualified Health Centers accept Medicaid
- Local Health Offices  
  [http://www.healthvermont.gov/local](http://www.healthvermont.gov/local)
- The Department of Vermont Health Access has a search tool for consumers:  
Why are only certain grades targeted by a school-based program, for instance 2nd and 3rd grade or 6th and 7th grade?

- National goals like Healthy People 2020 are focused on these age groups.
  - Ages in at which first and second molars frequently erupt.
  - Placing sealants on the first and second molars provides protection against tooth decay.
It can be difficult to get consent from parents/guardians for school based health care. What are some recommended models for obtaining written consents for oral health care in schools?

- Some of the strategies reported by members of NASN and ASTDD’s School and Adolescent Health Committee are:
  - Include the forms in the “back to school” packets with all of the paperwork that parents return to school at the beginning of the year.
  - Provide downloadable consent forms on the School District’s Health or School Nurse’s webpage.
  - Be present at Back-to-School Nights, Parent/Teacher Conferences, PTA/PTO meetings to promote the OH program and distribute forms.
FAQs– Dental Emergencies

What is a dental emergency?

- Any abnormal oral condition that causes pain or concern;
- An abscess (infection) toothache can cause pain, swelling or fever; or
- An injury to the teeth, gums or other oral structures.

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What might a dental emergency look like?
What might a dental emergency look like?

- Fractured Tooth
- Avulsed Tooth
- Gum Laceration
- Trauma from Piercing
Avoiding Emergencies

- Early, preventive dental care
- Use car seats, seat belts
- Do not place child in a shopping cart
- Use safety locks/latches on cabinets
- Keep cables and cords out of the way
- Gate stairs
- Supervise playground play
- Avoid oral piercings
- Wear Protective gear (helmets, mouthguards)
What might a school nurse have available if there is a dental emergency?

- Contact Info for Local Dentist(s)/Dental Clinic(s)
- Milk
- Mouth Mirror
- Dental Floss
- Flashlight
- Dental (Paraffin) Wax
- Gauze Squares
- Cold Compress
- Small Containers w/ Lids
THE FIELD-SIDE GUIDE TO DENTAL INJURIES

A Guide for Parents, Athletic Trainers, Caregivers, Teachers and... Patients!

Treating Dental Injuries

Anytime there is a dental injury, knowing what to do and how fast you need to react can mean the difference between saving or losing a tooth. And the person you need the most—a dentist—is probably not there. For this reason, Dear Doctor created this field-side guide so anyone can assist the injured person.

For purposes of discussion and clarity, time limits have been suggested related to the type of Injury and treatment needed; however, it is your dentist who should make that final decision.

WARNING: Anytime an injury involves blood, it is strongly advised that you protect both your hand and the health of the patient by avoiding direct, unprotected contact with any blood or bodily fluids. You should wear protective gloves when assisting a bleeding, injured person. If none are available, you may use a clean plastic bag or other sterile form of protection.

Immediate Treatment—Within 5 Minutes
A Permanent Tooth is Knocked Out (Avulsion)

WARNING: If there has been a loss of consciousness from a head injury, even temporarily, there may be a serious injury—go to the hospital. If providing care, wear protective gloves.

1) Verify the tooth is clean. If not, grab the crown of the tooth and rinse the root with clean water. DO NOT SCRUB OR SCRAPE THE ROOT SURFACE.

WARNING: If one or all the accident scene will instinct the tooth, or if the injured person is unwilling or unable to cooperate, or if the damage to the tooth and adjacent teeth is substantial, consider cleaning with water and placing the tooth in a plastic bag with the injured person’s saliva or in cold milk to keep it from drying while transporting the patient and tooth to a dentist.

2) Ensure the tooth’s orientation is correct with the flat tooth surface forward and insert the tooth back into the socket.

3) Apply sustained pressure to the tooth for 5 minutes to displace the blood accumulating in the socket and to set the tooth in its proper position. Then apply gentle pressure for 5 minutes with a wad of wet tissue or gauze on the edge of the tooth to keep it from coming out of the socket.

4) Obtain dental treatment for a thorough evaluation and long-term treatment for saving and permanently setting the tooth.

5) Get a tetanus shot within a day or two if you have not had one within the last 10 years and the wound was dirty.

NOTE: Primary (baby) teeth are not replanted.

Urgent Treatment—Within 6 Hours
A Tooth is Moved from Its Original Position

WARNING: If there has been a loss of consciousness from a head injury, even temporarily, there may be a serious injury—go to the hospital. If providing care, wear protective gloves.

Permanent Teeth
For teeth driven into or partially out of the jaw, push out of alignment, or teeth which are fractured, see a DENTIST as soon as possible (at a minimum within hours) for evaluation and treatment.

People often seek treatment at a hospital/emergency clinic when a dentist can be more helpful in assisting providing treatment options.

Trauma to Soft Tissues in the Mouth
1) Gently wash the wound with soap and clean water (especially outside the mouth if the lips and cheeks are involved.) If not possible, carefully remove any debris by hand.

2) Rinse thoroughly.

3) Apply direct pressure with gauze continuously for 10 minutes to control bleeding. If you cannot control the bleeding, call a dentist or go to an emergency room immediately.

4) See a dentist or an oral surgeon within 6 hours for a soft tissue evaluation and for any evidence of trauma and/or damage to teeth, jaws and jaw joints.

5) Get a tetanus shot within a day or two if you have not had one within the last 10 years and the wound was dirty.

Primary (Baby) Teeth
For pain, bleeding, or if a child is unable to bite and close the teeth together normally, call a dentist immediately.

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Less Urgent Treatment—Within 12 Hours
A Tooth is Chipped or Broken but Not Moved

WARNING: If there has been a loss of consciousness from a head injury, even temporarily, there may be a serious injury—go to the hospital. If providing care, wear protective gloves.

Permanent Teeth
• Chipped or Fractured Teeth: These teeth may be sensitive to touch, hot and/or cold, and should be treated within 12 hours to hopefully prevent any negative long-term issues. Be sure to locate any tooth fragments as they may be reattached to the crown of the tooth via tooth-colored bonding materials.

• A Loosened Tooth or One that’s Tender to Touch: See a dentist within 12 hours for an evaluation as the tooth may require splinting (support). Or, if no dental treatment is required, the dentist may need to examine and rearrange teeth for damage and to monitor them during future exams.

Primary (Baby) Teeth
• Chipped or Fractured Teeth: These teeth may be sensitive to touch, hot and/or cold, and should be treated within 12 hours to hopefully prevent any negative long-term issues. Treatment of primary teeth will depend on the nature of the damage and the proximity to the permanent tooth bud.

• A Loosened Tooth or One That’s Tender to Touch: See a dentist within 12 hours for an evaluation of the affected teeth. No treatment may be required but an evaluation as to whether or not an adjacent permanent tooth may have been damaged is important. The dentist may need to examine and x-ray teeth for damage and to monitor them during future exams.
Where can I get general information about oral health?

- American Dental Association’s “Mouth Healthy: www.mouthhealthy.org
- Association of State and Territorial Dental Directors www.astdd.org
Resources from NASN

- Oral health knowledge interactive self assessment
  [www.oralhealthconnections.org/Home/SelfAssessment](http://www.oralhealthconnections.org/Home/SelfAssessment)

- NYU’s *Smiles for Life Oral Health Curriculum* and other curricula for health providers

- NASN Radio Program: *Nurse's Guide to Student Oral Health*
  [www.jackstreet.com/jackstreet/WNASN.HayesZacharski.cfm](http://www.jackstreet.com/jackstreet/WNASN.HayesZacharski.cfm)

- Oral Health Videocast Series – National Association of School Nurses
  [http://www.oralhealthconnections.org/Videocasts](http://www.oralhealthconnections.org/Videocasts)

- ORAL HEALTH CONNECTIONS:
  [www.oralhealthconnections.org](http://www.oralhealthconnections.org)
51 million hours of school missed each year due to dental related issues.

Our focus is on **PREVENTION** and **EDUCATION**

- Stress on every student having a “dental home.”
- Appropriate fluorides: *community water fluoridation, varnish and other topical fluorides & toothpaste*
- Dental Sealants
- Mouth Guards
Questions?

Robin Miller, RDH, MPH
Oral Health Director, Vermont Department of Health
Robin.n.miller@Vermont.gov
802–863–7272

http://www.healthvermont.gov/wellness/oral-health